

REMARKS

The Office Action dated January 17, 2007, has been received and carefully noted. The above amendments and the following remarks are submitted as a full and complete response thereto.

By this Amendment, claims 1 and 8 have been amended. Support for the amendments to claims 1 and 8 can be found in at least Fig. 3 of the application as originally filed. No new matter is presented. Claims 9, 11, 12, 14 and 15 were withdrawn pursuant to an Election of Species Requirement dated April 13, 2006. Accordingly, claims 1, 3, 6-8, 10 and 13 are respectfully submitted for consideration.

Allowable Subject Matter

The Applicants wish to thank the Examiner for indicating allowable subject matter in claims 6 and 7. Claims 6 and 7 were not rewritten in independent form as they depend from claim 1 which is allowable for the reasons submitted below.

Finality of Office Action

Entry of this Amendment is proper under 37 C.F.R. §1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issues requiring further search and/or consideration on the part of the Examiner as the Amendment merely clarifies the claimed features of the invention; (c) satisfy a requirement of form asserted in the previous Office Action; (d) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (e) place the application in better form for appeal, should an appeal be necessary. The Amendment is necessary and

was not earlier presented because it is made in response to objections raised in the Final Rejection. Entry of the Amendment is thus respectfully requested.

Objection to the Information Disclosure Statement

The Examiner asserted that the Information Disclosure Statement (IDS) filed with the application on November 29, 2004 failed to comply with the Rules. As such, the Examiner did not consider JP 2001-355678, JP 10-202332, and JP 11-230255 cited in the IDS. The references JP 10-202332 and JP 11-230255 are "A" references which are not considered to be of particular relevance. The reference JP 2001-355678 is an "X" reference to claim 1 of the International Application.

In view of the amendments that have been made to claim 1, the Applicants respectfully submit that JP 2001-355678 is no longer material to the patentability of the pending claims for the following reasons.

JP 2001-355678 discloses a torque variation absorption damper comprised of an annular sleeve 2 which is mounted by means of a damper rubber 3 on the outer peripheral side of a hub 1 which is mounted on a rotational axis. The relative position of the sleeve 2 is changeable in terms of the circumferential direction. An annular mass 4 is fixed on the outer peripheral side of the sleeve 2. A pulley 5 is supported on the outer peripheral side of the annular mass 4, wherein the relative position of the pulley is changeable in terms of the circumferential direction. The pulley is made of a low-friction synthetic resin. A coupling member 6 couples the sleeve 2 with the pulley 5, wherein the position of each of the sleeve 2 and the pulley 5 is changeable in terms of the circumferential direction. This annular mass 4 is made of a sintered or cast material as a whole and is different from the inertia mass element of the present invention in which

arc-shaped ring pieces are connected in the peripheral and axial directions. Furthermore, the annular mass 4 in JP 2001-355678 is fixed on the outer peripheral side of the sleeve 2 and it is not one which is fixed inside the annular pulley which is a rigid body, as the inertia mass element of the present invention. Consequently, the reference 2001-355678 is not material to the patentability of the present invention.

Rejection Under 35 U.S.C. § 112

Claims 1 and 8 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. The Applicants have amended claims 1 and 8 to clarify that the "thickness direction is an axial direction." Accordingly, the Applicants respectfully submit that all claims are in compliance with U.S. patent practice.

Rejections Under 35 U.S.C. § 103

Claims 1, 3, 8 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,591,093 to Asai et al. (hereinafter Asai) taken in view of U.S. Patent No. 2,198,135 to Strasburg et al. (hereinafter Strasburg) and further in view of European Publication No. 0013129 to Tresselt et al. (hereinafter Tresselt). The Office Action admitted that Asai does not disclose a predetermined inertial mass comprising an annular inertia mass element fixed in the concave portion wherein the inertia mass element is comprised of a laminate of annular plates formed of plural arc-shaped ring pieces bonded in a circumferential direction and a thickness direction. Strasburg and Tresselt were cited for curing this deficiency. The Applicants traverse the rejection and respectfully submit that claims 1, 3, 8 and 10 recite subject matter that is neither disclosed nor suggested by the cited references.

Asai discloses a damper pulley comprising a central portion, a belt retaining portion and a rubber or elastic member therebetween. The central portion includes an axially extending tubular boss portion 10, a main portion 20, extending radially outwardly therefrom, and a flange 210 that is bent at about 90° from main portion 20 so as to extend axially from the outer periphery of the main portion 20. The boss 10, main portion 20 and flange 210 define a circular space S1 having a substantially U-shaped cross-section. A ring-shaped belt retaining portion 30, which has a generally U-shaped cross-section interior open space S2 reverse to the space S1, is formed from a thin metal plate. See column 1, lines 20-35 of Asai.

Strasburg discloses an engine vibration eliminator which contains within a chamber 3 a plurality of segmental weights 10 of any suitable metal separated from each other by a plurality of resilient spacers 11. The spacers also separate the weights from the outermost and innermost cylindrical surfaces 4 and 5, respectively. The spacers also perform the function of biasing the weight segments in the circumferential direction to hold the spacers apart from each other with a certain particular force.

Tresselt discloses a viscous vibration damper comprising a series of stacked welded discs 40, 42, 44 with the discs 44 having dimples 66 all stacked at the same position on each plate. The discs are formed by a suitable means such as a punch press with the dimples being similarly formed. After the discs are stacked together and aligned using the dimples, they are clamped and welded together. Each of the discs is a perfect complete round annular plate.

With respect to claim 1, the Applicants respectfully submit that the combination of Asai, Strasburg and Tresselt fails to disclose or suggest the claimed features of the

invention. Claim 1, as amended, recites that the inertia mass element is comprised of a laminate of annular plates formed of contiguous plural arc-shaped ring pieces bonded in a circumferential direction and in an axial direction. However, Strasburg does not disclose or suggest contiguous plural arc-shaped ring pieces. In contrast, Strasburg discloses a plurality of segmental weights 10 separated from each other by a plurality of resilient spacers 11. The spacers 11 in Strasburg are rectangular. See column 2, lines 8–34 of Strasburg. Therefore, although the Office Action asserted that the segmental weights 10 and resilient spacers 11, in combination, were comparable to the arc-shaped ring pieces, the Applicants submit that the spacers 11 are not arc-shaped and that the weights 10, which are arc-shaped, are not contiguous because they are separated by the rectangular spacers 11.

Tresselt was cited for curing the deficiencies in the combination of Asai and Strasburg. However, Tresselt also does not disclose contiguous plural arc-shaped ring pieces bonded in a circumferential direction. In contrast, Tresselt discloses discs (40, 42 and 44, for example) for a solid singular disc which does not provide plural arc-shaped ring pieces bonded in the circumferential direction. As such, Tresselt fails to cure the deficiencies in Strasburg and Asai with respect to claim 1.

Claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Asai in view of Strasburg and Tresselt and further in view of Critton et al. (U.S. Patent No. 4,872,369, "Critton"). Asai, Strasburg and Tresselt were cited for disclosing many of the claimed elements of the invention with the exception a resin being filled into the concave portion of the pulley body after the inertia mass is inserted. Critton was cited for curing this deficiency.

Critton discloses that in a torsional vibration damper having a roll spun housing that defines an annular working chamber 11, within which is housed a complementary inertia member ring 12, and with the axially open side of the housing closed by a closure 13. See column 2, lines 56–62 of Critton. After the closure 13 has been secured to the housing 10, filling the chamber 11 with viscous hydraulic damping fluid such as a suitable viscosity silicone may be effected. See column 4, lines 65–67 of Critton.

With respect to claim 13, the Applicants respectfully submit that the cited references do not disclose or suggest the features of the invention as recited in independent claim 1, and therefore, dependent claim 13. In particular, Critton does not disclose or suggest at least the features of an inertia mass element comprised of a laminate of annular plates formed of contiguous plural arc-shaped ring pieces bonded in a circumferential direction and in an axial direction. As such, Critton fails to cure the deficiencies in Asai, Strasburg and Tresselt. Therefore, the combination of references fails to disclose or suggest the features of the invention as recited in claim 13.

To establish a *prima facie* case of obviousness, each and every feature of a rejected claim must be taught or suggested by the applied art of record. See M.P.E.P. § 2143.03.

In view of the above, the Applicants respectfully submit that Asai, Strasburg, Tresselt and Critton fail to support a *prima facie* case of obviousness for purposes of a rejection of claim 1 under 35 U.S.C. § 103. Accordingly, claim 1 is not rendered obvious in view of Asai, Strasburg, Tresselt and Critton and should be deemed allowable.

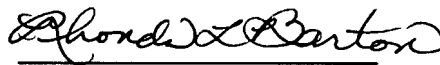
Conclusion

The Applicants respectfully submit that claim 1 is allowable. Claims 3, 6-8, 10 and 13 depend from claim 1. The Applicants further submit that these claims incorporate the patentable aspects thereof, and are therefore allowable for at least the same reasons as discussed above. Accordingly, the Applicants respectfully request withdrawal of the objections and rejections, allowance of claims 1, 3, 6-8, 10 and 13 and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing Attorney Dkt. No. 101136-00120.**

Respectfully submitted,



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Enclosure: Petition for Extension of Time (two months)

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